

REMARKS

In view of the above amendments and the following remarks, reconsideration of the rejections and further examination are requested. Upon entry of this amendment, the specification is amended, the abstract is amended, claims 11, 13, 15 and 16 are amended, and claims 1-10, 15 and 17-20 are cancelled, leaving claims 11-13, 15 and 16 pending with claim 11 being independent. No new matter has been added.

Specification

The specification and abstract have been carefully reviewed and revised to correct grammatical and idiomatic errors in order to aid the Examiner in further consideration of the application. No new matter has been added.

Rejections Under 35 U.S.C. §112, second paragraph

Claims 11-16 have been rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention.

Claim 11 has been amended to overcome this rejection and claim 14 has been cancelled. In particular, claim 11 has been amended to further define the “transferring area”, the “cleaning area”, and the “polishing area”.

With regard to the term “unit”, applicants submit that this is term would be clear to one of ordinary skill in the art. In particular, according to the Oxford dictionary, "unit" means "a small machine that has a particular purpose or is part of a larger machine". Thus, it is clear that the polishing unit is part of the substrate polishing apparatus. Moreover, the specification of this application on page 18, lines 14 to 16, states that "[e]ach of the polishing units 110A, 110B comprises a bevel polishing mechanism having the polishing head 35, the pusher cylinder 36, the polishing tape supply mechanism 6, which are illustrated in FIG. 1". Additionally, the specification states on page 18, lines 24 to 26 that "[c]omponents of the polishing units 110A, 110B which will not be described below are identical to those of the polishing apparatus shown in FIG, 1". From such descriptions, it is apparent that one of ordinary skill in the art would understand that the term “the polishing unit” could be interpreted as "a polishing machine" or "a polishing apparatus".

Rejections Under 35 U.S.C. §103(a)

Claims 11-16 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Nishi (U.S. 6,500,051) in view of Hasegawa et al. (U.S. 5,733,181).

Applicants submit that the claims as now pending are allowable over the cited prior art. Specifically, amended independent claim 11 recites a substrate processing apparatus comprising a first partition dividing an internal space of the substrate processing apparatus into a transferring area in which a transfer robot is disposed and a cleaning area in which a cleaning unit and a drying unit are disposed, and a second partition dividing the internal space of the substrate processing apparatus into the cleaning area and a polishing area in which a polishing unit is disposed, wherein an internal pressure of the polishing area is set to be lower than an internal pressure of the cleaning area, and an internal pressure of the transferring area is set to be higher than the internal pressure of the cleaning area.

Applicants submit that the cited prior art fails to disclose or render obvious such an apparatus. In particular, Nishi discloses a polishing apparatus having a polishing section 2 for polishing a workpiece such as a semiconductor wafer to a flat mirror finish and a cleaning section for cleaning the workpiece which has been polished. Nishi also includes a partition 22 that isolates the polishing section 2 from transport robot 69 and cleaning unit 74. However, there is no partition that isolates the transport robot 69 from the cleaning unit 74, as can be clearly seen from FIG. 4A. Additionally, since there is no partition separating the transferring area from the cleaning area, Nishi cannot disclose an internal pressure of the transferring area that is set to be higher than the internal pressure of the cleaning area, as recited in independent claim 11.

Hasegawa fails to overcome these deficiencies of Nishi. Moreover, there is no reasoning in the prior art to modify either Nishi or Hasegawa, such that the combination thereof would have rendered claim 11 obvious.

Therefore, Applicants submit that independent claim 11 and its dependent claims are allowable over the cited prior art. Further, each of the dependent claims recites additional subject matter that further distinguishes it from the cited prior art. For example, claim 16 recites a chemical mechanical polishing unit configured to polish a surface of the substrate by pressing the substrate against a polishing table, the chemical mechanical polishing unit being disposed in the polishing area. Thus, both the polishing unit and the chemical mechanical polishing unit are

located in the polishing area. Neither Nishi nor Hasegawa discloses two different types of polishing units in a polishing area that is isolated from a cleaning area and a transferring area. Moreover, there is no reasoning in the prior art to modify either reference, such that the combination thereof would have rendered claim 16 obvious.

Therefore, Applicants submit that dependent claim 16 is allowable for at least this reason.

Conclusion

In view of the foregoing amendments and remarks, all of the claims now pending in this application are believed to be in condition for allowance. Reconsideration and favorable action are respectfully solicited.

Should the Examiner believe there are any remaining issues that must be resolved before this application can be allowed, it is respectfully requested that the Examiner contact the undersigned by telephone in order to resolve such issues.

Respectfully submitted,

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/Jeffrey J. Howell/

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